GEOLOGY
1935

App. F. IX-4

Previous References 1935.6 (Geol)

File No. 101-35
Serial Nos. 1-6

Letter References.

Geol 20-36

GENERAL AND REVENUE SECRETARIAT.

Serial Nos. six

(25)

Part B for July 36

SUBJECT.

Minimising the number of accidents in Kolar gold fields

WD 03607—GPB—22,500—2-8-35

Vasantha Mahal,

Mysore, 14th December 1935.

C.724:
1 File

4679
16-12.

My dear Mirza,

In returning you herewith your file No.320, dated the 12th instant, containing the review of the administration report of the Department of Mines, I am desired by His Highness the Maharaja to remind you of the discussion we had in September last on the subject of the possibility of minimising the number of accidents, particularly at the Kolar Gold Fields.

It would appear from the report that there are two classes of accidents that should prima facie be susceptible of more control by regulation, those which result from falling down shafts or stopes, of which there were 19 in 1934-35, and those connected with explosives, which were responsible for 22 deaths in the same year.

His Highness would be glad to know whether the questions of more efficient protection of the entrances to shafts and of the prevention of accidents through explosives

Mines

Administration Report of the Department of

by

Gpdd 39.35 all

D-40548 2-1-36

Geol 101-35-1

50.85
a 8/12

A draft D.O. is submitted for approval. Papers regarding the previous enquiry of the Inspector's report are also placed below

S. Secretary

MV.
19.12.35

MV
29/12/35.

MV
30.12.35.

3 Issue

MG
30/12/35

30. DEC. 19
MINES & GEOL. SECTT.

Sgs B for 15
GK
6/1

Issued No D 40548
dated 2/1/36.

My dear Sir,

I am directed to invite reference to Part III of the annual report of your department in regard to accidents and to state that Government view with very great concern the increase in the number of fatality thereof due to negligence or recklessness. Govt feel that a circular which should bring forcibly to notice of persons concerned by regulations and the training of the workmen in safety precautions and will be glad to know what action is being taken by the Mining authorities and your Department in the direction of reducing such accidents.

Yours sincerely

MV.

C. & S. Rlys etc.

Extract from file no Genl 39-35 (1-7) re Diary no 1328 re the Administration Report of the Department of Mines & Resources for 1934-35

General and Revenue Secretariat. | File No. of 193 | [App. F. III-2

NOTE—Contn. Sheet.

Lessons the number of
Mining accident, U.P.F.

3723 \ 5635

Govt. File No.

of 193

General and Revenue Secretariat

Letter no 2678 dated 21/5/36 from the Chief Inspector of Mines & Boilers Govt. Kind reply invited to letter no B/C 724 dated 14/12/35 from the Private Secy to H.E. the Governor. The Chief Inspector of Mines & Boilers was addressed in the matter of taking adequate steps to prevent accidents. An ad-interim report was received from him to the effect that this subject is now under the active consideration of the members of the Mining Board & that a final reply would be sent on receipt of a report from the Mining Board. The receipt of the same is awaited. An ad-interim reply was not sent to the Private Secy to H.E. the Governor as the receipt of the Chief Inspector's report is awaited.

P. Unit

Flag K.

Flag I

Flag J

26/5 A draft is put up as desired by the Asst Secy for consideration

Sd/ 26/5

Sd/ 26/5

Their draft is ready 26.5.36

Asst Secy 26.5.36

7/7/36
27.11

5

Minimising accidents in mines

General and Revenue Secretariat | Secl File No. 101 of 193 5 — [App. F. III—2

Serial No.	
	Draft D.O. reply for approval & signature. MW 27.5.36. W. 27.5.36
	OFFICE OF THE SECOND MEMBER OF GOVERNMENT 27 MAY 1936 NO. 9220
	9 Issue 28/5/36 MW 28.5.36.
	10 Issue W. 28.5.36
3 4	To, The Chief Inspector of Mines & Explosives No D.7296 dated 29/5/36 Stating that he may send a suitable reply to the Private Secretary to H.E. the Governor regarding his query as to the feasibility of devising suitable safes to prevent accidents & send a copy to him (Secretary) for
P.S. to M. II 4	From the Chief Inspector of Mines & Explosives No 2750 dated 6/6/36 Sds a copy of his D.O. letter to the Private Secy to H.E.
P.S. to M. II 5	From the Chief Inspector of Mines & Explosives No 2751 dated 6/6/36

TYPING SECTION 28 MAY 1936 GENL & REV. SECTT. 4-50

NOTE.—Contn. Sheet.

WD 03594—GPB—30,000—18-7-35

b

Mining accidents in mines
5635 V 5520 V 5524

Secret

File No. 101 of 193 5-

General and Revenue. Secretariat

Is a report called for in para 1 above regarding the action taken in the matter of minimising accidents in the mines

11) Subd with reg to paras 1, 4 & 8 above & forwarded a copy of the Chief Inspector's letter (P.W.D. II) with a copy of letter No. 163 dated 18/4/36 from the Secretary, Messrs Golam Taylor & Sons' Committee and graphs will be sent to the Private Secy to H.E. the Honourable Minister in reply to his letter dated 14-6-[illegible]

12) For perusal

Secy) 13.6.36.

13) Please put up a draft letter for submission to the Minister.

14) Subd with a draft as directed for consideration

15) For approval.

16) Secretary

17) A fair draft may be put up after

OFFICE OF THE CHIEF MINISTER OF BENGAL
No. 9957

Minimising mining accidents
S-9(21) Geol. 7

General & Revenue Secretariat. | Ped File No. 101 of 193 5. | [App. F. III–2

Serial No.	
	very frequently the paragraphs that have been added
	DMW 25/6/36.
	MW 25.6.36. 25/6/36
	18) Should not a four digit number be added after classification. The number of accidents due to explosives referred to in the last para of the four digit relates to the calendar year 1934
	C. 88 7/7 19) As they say 8.7.36
	20) See Mr. Mw 8.7.36. Ch. 9.7.36
	DMW 10/7/36 MW 11.7.36.
	Issue Ch. 11.7.36
6	To the Private Secy to H.E. the Governor No D 322 dt 13/7/36 dd for submission to H.E. copies of letters dated 6/6/36 & 10/7/36.
	B 23/7

RECD. BY THE SECRETARIAT OF EXECUTIVE COUNCIL 9 JULY 1936 No. 241

TYPING SECTION 13. JUL. 1936 GENL. & REV. SECTT.

GENL. & REV. SECTT. 23 JULY 1936 DEVELOPMENT SECTT.

NOTE—Contn. Sheet.

D.4054 Y

31st December '35

2-1-36

My Dear Sir,

I am directed to invite reference to Part III of the administration report of your Department in regard to accidents and to state that Government view with very great concern the increase in the number especially those due to negligence or recklessness. Government feel that accidents which result from falling down shafts or stopes and those connected with explosives should prima facie be susceptible of more control by regulation and the training of the workmen in safety precautions and will be glad to know what action is being taken by the Mining Authorities and your Department in the direction of minimising such accidents.

Yours sincerely,

D.M.

C.E.Suryanarayana Rao, Esq., Mem. A.I.M.E., Etc.,
Chief Inspector of Mines and Explosives, K.G.F.

Appendix F G—1]

9

SUBJECT.....

.....

.....

Section Geol.

File No. 39-35

Serial No.

Diary No. of letter replied to..... D.O. No. D.4852.

To

Dear Sir,

I am desired to invite ref.ce to D.O.No.D.4052/Geol.39-35/G dated 2.1.36, requesting to be furnished with information as to the action ~~that is being~~ taken by the Mining Authorities and the Dept. in the matter of minimising accidents in the mines, and to request you kindly to furnish your report in the matter at a very early date.

Yours sincerely

6/2/36.

To. the Chief Inspector of Mines Kolar.

General and Revenue Secretariat

( )

the 193

Date of issue 11.2.36

Signed by Mr D.C.S

List of enclosures.....

Copied by [illegible] 7/2/36

Examined by.....

WD 03601—GPB—30,000—23-9-35

3223

10 13/2

GOVERNMENT OF MYSORE.

Telegraphic Address :—
"MINESPECTOR"

DEPARTMENT OF MINES AND EXPLOSIVES.

D.O.No. 1946

DEWAN'S OFFICE
15 FEB. 1936
No. 5D 13

Dated Oorgaum, 12th February 1936.
(S. India).

Dear Sir,

I beg to acknowledge receipt of your D.O. letter No.4856 dated 11th February 1936 regarding action taken in the matter of minimising accidents in Mines. This subject is now under the active consideration of the members of the Mining Board and I shall submit my report as soon as their report is received.

Yours sincerely,

C E Jayarajayanadam

M. Venkatanaranappa, Esq., B.A.,
Secretary to the Government of
His Highness the Maharaja of Mysore,
Development Department, Bangalore.

For perusal.
Secretary Mining Board
Dewan
13.2.36.
15-2-36

DEVEL

NOTE.—Contn. Sheet.

WD 03591—GPB—30,000—13-7-35

Geol. 101-35-2

Telegraphic Address :—
"MINESPECTOR"

DEPARTMENT OF MINES AND EXPLOSIVES.

Dated Oorgaum, 21st May 1936.
(S. India).

D.O.No. 2678
Enc: one

22 MAY 1936
DEVELOPMENT BRANCH

Dear Mr. Venkatanaranappa,

I have herein enclosed copy of a letter received from Sir Charles Todhunter, K.C.S.I., Private Secretary to His Highness the Maharaja of Mysore. I request you to kindly let me know whether I can send my reply to his querry direct to him.

Regarding para 3 of the letter, I have not reported to him at any time that an enquiry was in progress re-lessening the number of accidents in general. I do not know if the Secretariat has written to him on this subject.

Thanking you in anticipation for an early reply-

Yours sincerely,

C E Jayaraosayeedane

M.Venkatanaranappa, Esq., B.A.,
Secretary to the Government of
His Highness the Maharaja of Mysore,
Development Department, Bangalore.

12

D.O. letter No.C 923 dated 11th May 1936 from Sir Charles Todhunter, K.C.S.I., J.P., Private Secretary to His Highness the Maharaja of Mysore, Awdry House, Fern Hill, Nilgiris.

Dear Mr. Suryanarayana Rau,

I am desired by His Highness the Maharaja to acknowledge the receipt of your official letter No.2579 of the 6th instant, confirming a telephone message regarding the accident to timber cooly Periaswami, who was killed by falling out of the cage in which he was riding up.

I am desired to enquire whether it is not practicable to devise cages which will prevent accidents of this kind.

I am further desired to remind you that some little time bac you reported that an enquiry was in progress with the object of lessening the number of accidents in general, and to ask when the report of that enquiry may be expected.

Copy

C E S Rau

Chief Inspector of Mines &
Explosives in Mysore.
21/5/1936.

Geol. 101-35-3 2

Draft D.O. 13

7296 29-5-36

Dear Mr. Suryanarayana Rao,

With reference to your (Y) D.O. letter No.2678 dated 21st May 1936, I am desired to state that you may send ~~a~~suitable reply to the Private Secretary to His Highness the Maharaja of Mysore regarding his query as to the feasibility of devising suitable cages to prevent accidents; ~~and send a copy~~ to me.

As regards para 2 of your letter I am to invite reference to my D.O.No.D. 4054 (X) dated 2-1-36 enquiring what action is being taken by the Mining authorities and your department with a view to minimise accidents in Mines especially those due to negligence and recklessness, and your (X) reply thereto stating that the question is under the active consideration of the Mining Board and promising to submit a report.

~~As the recent increase in~~ The number of accidents in the Mines is causing grave concern to Government, and I am to request you to kindly expedite the submission of your report.

Yours sincerely,

MW.

I (X)

J (X)

26.5.36

29/5

14

29th May 1936.

Dear Mr. Suryanarayana Rao,

With reference to your D.O. letter No. 2678, dated 21st May 1936, I am desired to state that you may send a suitable reply to the Private Secretary to His Highness the Maharaja of Mysore regarding his query as to the feasibility of devising suitable cages to prevent accidents and send a copy to me.

As regards para 2 of your letter, I am to invite reference to my D.O. No. D. 4054 dated 2nd January 1936 enquiring what action is being taken by the Mining authorities and your department with a view to minimise accidents in Mines especially those due to negligence and recklessness and your reply thereto stating that the question is under the active consideration of the Mining Board and promising to submit a report.

The number of accidents in the Mines is causing grave concern to Government and I am to request you to kindly expedite the submission your report.

Yours sincerely,

C.E. Suryanarayana Rao, Esq., Mem., A.I.M.E., Assoc.I.M.M. (Lond.)
Chief Inspector of Mines & Boilers
Kolar Gold Fields.

Telegraphic Address :— "MINESPECTOR"

GOVERNMENT OF MYSORE.

DEPARTMENT OF MINES AND EXPLOSIVES.

D.O.No. 27508 *Dated Oorgaum,* 5th June 1936.
(S. India).

Enc: One.

9 JUNE 1936
DEVELOPMENT BRANCH

Dear Mr. Venkatanaranappa,

Adverting to your D.O. letter No.D.7296/Geol 29-5-36 dated 29th May 1936, I have herein enclosed for the information of Government copy of my D.O. letter to the Private Secretary to His Highness in the matter of devising suitable cages to prevent persons from falling out of them while riding in shafts.

The report of enquiry regarding the lessening of the number of accidents in general has been submitted under separate cover. This subject was discussed in detail at an informal meeting of the members of the Mining Board by the 2nd Member of Council during his visit to the Field in March 1936..

Yours sincerely,

C E Singanayanadam

M. Venkatanaranappa, Esq., B.A.,
Secretary to the Government of
H.H. the Maharaja of Mysore,
Development Department,
Bangalore.

D. M. E. 31.]

Telegraphic address:
"MINESPECTOR."

DEPARTMENT OF MINES AND EXPLOSIVES.

OFFICE OF THE CHIEF INSPECTOR OF MINES IN MYSORE.

D.O. No. 2749 /Encl: One

Dated, Oorgaum, 5th June 1936.

Dear Sir,

I beg to acknowledge receipt of your D.O.letter No.C.923 dated 11th May 1936, enquiring whether it is not practicable to devise cages to prevent persons from falling out of them while riding in shafts.

All cages working in shafts and intended for the conveyance of persons are so designed as to prevent any portion of the body of any person travelling therein from coming in contact with the sides of the shaft. The cage entrances are also provided with doors which are so constructed that they cannot open outwards. Suitable latches are also provided to prevent them from opening of themselves.

A blue print of the cage in which this accident occurred is enclosed for reference. This cage works in a steeply inclined shaft and runs on steel rails. Its sides and doors are perforated - not shown in the blue print - to provide free ventilation to persons riding in it. It will be seen that it has 3 decks, bottom, middle and top. After the men enter the cage, the doors are closed and latched by a person specially appointed for the purpose.

In the case under report the deceased cooly Periaswami for some unknown reason is stated to have lifted the latch and opened the door while the cage was in motion. His body came in contact with the shaft timbers, was pulled out of the cage and killed instantaneously. The result of this action may be compared with that of a railway passenger leaning out of the window of his carriage while the train is running through a narrow tunnel. These cages have been in commission since 1922 and about 1,300 persons ride in them every day. This is the first accident of its kind so far.

The report of enquiry regarding the lessening of the number of accidents in general has been submitted to Government. Probably they may have

have reported to you about this enquiry being in progress.

Yours sincerely,

Sd./- C.E.Suryanarayana Rau.

Sir Charles Todhunter, K.C.S.I., J.P.,

Private Secretary to His Highness the
Maharaja of Mysore,

M y s o r e.

"Copy"

C E Suryanarayana Rau

Chief Inspector of Mines &
Explosives in Mysore.

Genl. 107-35-1

D.M.E. 31.]

Telegraphic address:
"MINESPECTOR."

DEPARTMENT OF MINES AND EXPLOSIVES.

OFFICE OF THE CHIEF INSPECTOR OF MINES IN MYSORE.

D.O. No. 2751/Eve:3.

Dated, Oorgaum, 5th June 1936.

9 JUNE 1936
DEVELOPMENT BRANCH

Dear Sir,

In continuation of the correspondence ending with my D.O.letter No.1941 dated 12th February 1936 regarding the action taken in the matter of minimising accidents in the Mines, I beg to state that the attention of the Mine Superintendents was drawn to the grave concern expressed by Government and at the same time a statement of accidents resulting from falling down shafts, winzes, stopes, etc., was forwarded to the Superintendents of Mines with a request to notify this Department, the various measures they propose to take to minimise accidents. The Superintendents, taking advantage of the presence on the Field of Messrs. Sydney Taylor and Arthur Taylor, Members of the Firm of Messrs. John Taylor & Sons, discussed this question in detail with them and arrived at certain decisions. These are fully explained by the Secretary, Messrs. John Taylor & Sons Committee, in his letter No.163 dated 18th February 1936, copy enclosed for reference. It will be seen therefrom what steps are being taken to minimise the number of accidents in mines.

In addition to the above detailed enquiries are instituted by this Department into all serious and fatal accidents and deterrent action is taken against those found responsible for any of them. As personal factor or human element plays a very important part in all cases of accidents due to negligence or recklessness education of the workmen in safety principles is essential to prevent them from taking risks. Besides the educative propaganda carried on by the mining authorities in this respect, the Officers of this Department, in the course of their inspection rounds, insist on the underground workmen adopting all the accident prevention methods and anybody found taking unnecessary risk is severely dealt with.

Considering the large quantity of explosives used - about 700500 lbs. per annum - the number of accidents due to explosives in mines here compares very favourably with those occurring in other mining centres.

All

All persons conducting blasting operations are required to pass an examination held by this Department and possess certificates therefor. Uncertified persons, whenever found handling explosives, are punished.

A graph showing the rate of accidents to 1,000 men employed is enclosed herewith and it will be seen therefrom that accidents and death rates are actually on the decrease in spite of the increase of the underground labour from about 8500 in 1930 to 14000 at the end of 1935.

A certain amount of risk and danger is inherent in underground work and all known methods are being adopted to carry on mining operations in the safest manner possible and no expense is spared to safeguard the life and limb of the workmen. In this connection I would like to invite reference to the curves in chart II accompanying this letter. It will be seen that although the average tonnage excavated during the years 1930 to 1934 is about 7 lakhs per annum, the cost of support of workings during the same period has risen from 13 lakhs to over 21 lakhs and this has largely contributed to minimise the number of accidents.

Yours sincerely,

C E Srinivasayanadam

M. Venkatanaranappa, Esq., B.A.,
Secretary to the Government of His Highness
the Maharaja of Mysore, Development Department,
B a n g a l o r e.

MESSRS.JOHN TAYLOR & SONS' COMMITTEE,

Oorgaum, South India.

18th February 1936.

Ref.No.163.

To

THE CHIEF INSPECTOR OF MINES &

EXPLOSIVES IN MYSORE, O O R G A U M.

Sir,

I have the honour to refer to your letters dated 8th January addressed to the Superintendents of the Mysore, Champion Reef, Ooregum and Nundydroog Companies conveying the expression of Government's concern regarding the number of underground accidents during recent years and requesting to be informed of the measures proposed to be taken to minimise them

I am instructed to inform you that the matter has been given most careful consideration by Messrs. John Taylor & Sons Committee who desire me to say that in the question of accidents they share Government's concern and that the matter is constantly before the respective Mine Superintendents who at no time have ceased to realise the utmost importance of the subject and the need for taking all possible and practical steps towards their prevention.

On behalf of Messrs. John Taylor & Sons' Committee I submit herewith their reply to the questions raised in your letter.

1. Measures adopted by the Mining Authorities to minimise Accidents.

Rockbursts.

Every endeavour is being made to minimise the effects and prevent the occurrence of rockbursts. The Companies are constantly in touch with methods of mining and support of ground in South Africa and other countries, but it is felt that these problems as met with on the Kolar Gold Field are more acute than those encountered elsewhere and that the costly methods used in these Mines for supporting ground, such as granite pack walls, arching of levels, with concrete or brick, steel setting of levels, etc., are in advance of any employed in other parts of the world. With the measures now in force the Mining Authorities feel more & more confident regarding the rockburst problem. C E Rao Other